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(54) Title: SOLID-PHASE PREPARATION OF [<sup>18</sup>F]FLUOROHALOALKANES

(57) **Abstract:** The invention relates to a process for the production of an [<sup>18</sup>F]fluorohaloalkane which comprises treatment of a solid support-bound precursor of formula (I): SOLID SUPPORT-LINKER-SO<sub>2</sub>-O-(CH<sub>2</sub>)<sub>n</sub>X (I) wherein n is an integer of from (1) to (7) and X is chloro, bromo or iodo; with <sup>18</sup>F<sup>-</sup> to produce the [<sup>18</sup>F]fluorohaloalkane of formula (II) <sup>18</sup>F-(CH<sub>2</sub>)<sub>n</sub>-X (II) wherein n and X are as defined for the compound of formula (I), optionally followed by (i) removal of excess <sup>18</sup>F<sup>-</sup>, for example by ion-exchange chromatography; and/or (ii) removal of organic solvent.

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